

## (57) ABSTRACT

The present invention describes a novel human gene, *DYXC1*, which is functionally related to dyslexia. *DYXC1* gene encodes a 420-amino acid residue protein. *DYXC1* is  
5 expressed in several tissues, including the brain, and is localized in the nucleus. In addition, four single nucleotide polymorphisms (SNPs) in *DYXC1* mRNA have been characterized in this invention. The invention provides diagnostic methods and materials for analysing allelic variation in *DYXC1* gene. This invention also provides polypeptides encoded by *DYXC1* gene and antibodies binding to said polypeptides.